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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,070	05/05/2004	Roy J. Riccomini	PA2210US	6645
22830	7590	01/11/2006	EXAMINER	
CARR & FERRELL LLP 2200 GENG ROAD PALO ALTO, CA 94303			OSORIO, RICARDO	
			ART UNIT	PAPER NUMBER
			2673	

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/840,070

Applicant(s)

RICCOMINI ET AL.

Examiner

RICARDO L. OSORIO

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 5, 6, 8-11, and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Maatta et al. (US 2002/0093328).

Regarding claims 1 and 9, Maatta teaches of a hand-held computing device (page 3, paragraph 49, line 4) comprising: a housing sized to be held in hands of a user during operation of the hand-held computing device (Fig. 11), the housing having an upper surface defining a first plane (Fig. 1, reference character 108); a display disposed on the upper surface of the housing (Fig. 1, reference character 120) the display configured to display at least one object (page 5, col. 60, line 8); and a set of controls integrated with the housing, the set of controls for providing user input to a processor (page 1, paragraph 4, lines 8-9), the set of controls being positioned about the housing so as to enable manipulation of the set of controls by digits of the user (see Fig. 11, reference characters 940, 950, keys, etc.), the set of controls comprising at least one continually variable analog input device configured to generate an analog signal representing displacement information (see Fig. 5b, and paragraphs 49, 50 and 60); the displacement information

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comprising information representative of a speed at which the object changes position (paragraph 50, lines 6-10, and paragraph 60, lines 6-8).

Regarding claims 2 and 10, Maatta teaches that the analog input device comprises a joystick (Fig. 11, reference numeral 940) terminating at its upper end in a cap (402, 502, 602, 702).

Regarding claims 5, 6, and 11, Maatta teaches that the cap is disposed at least partially in a well located within, or defined by a portion of, the upper surface (Fig. 5a, reference character 501) such that the cap does not protrude substantially above the plane defined by the upper surface (see Fig. 5a, reference character 502).

Regarding claim 8, Maatta teaches that the at least one analog input device is configured to generate first and second analog signals representative of displacement in a first and a second mutually orthogonal dimensions (see paragraph 49, lines 6-9).

Regarding claims 16, Maatta teaches of means for limiting force resulting from manipulation by the digits of the user (paragraph 50, lines 6-10).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maatta in view of Kudoh (6,751,312).

Regarding claims 4 and 13, Maatta does not precisely teach of the joystick cap comprising a concave-shaped top.

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Kudoh teaches of a handheld computing device having a (joystick) wherein the cap comprises a concave shaped top (Fig. 6, reference character 8A).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have a cap with a concave-shaped top, as taught by Kudoh, in the device of Maatta, to provide comfort and tactile feedback to the user.

5. Claims 2 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maatta in view of Slotta (6,724,369).

Regarding claims 3 and 12, Maatta does not precisely teach of the joystick cap comprising a convex-shaped top.

Slotta teaches of a joystick cap comprising a convex shaped top (Fig. 11, reference character 505).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the joystick cap with a convex shaped top, as taught by Slotta, in the device of Maatta since it is well known in the art of pointing sticks to use joystick caps shaped either convex or concave, alternately, as desired by the user/manufacturer to suite the comfort or practicality of the user, for example, a concave cap helps the user at least in resting his finger on it, and the convex cap helps the user at least in identifying the cap easier and for tactile feedback purposes (see Fig. 9, reference character 408, Fig. 11, reference character 505, col. 8, lines 44-46, and col. 9, lines 8-10).

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6. Claims 7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maatta in view of Martin et al. (6,563,487).

Regarding claims 7 and 14, Maatta fails to specifically teach that the analog input device comprises a trackball.

Martin teaches that a trackball can be used instead of the joystick (col. 5, line 64-col. 6, line 7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the trackball, as taught by Martin, instead of the joystick of Maatta, since the joystick and the trackball can be interchangeably used for operating similarly (col. 6, lines 3-5).

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maatta in view of Grome et al (6,580,418).

Regarding claim 15, Maatta fails to specifically teach that the means to provide user input includes at least a potentiometer.

Grome teaches that the means to provide user input includes at least a potentiometer (col. 4, lines 25-28).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the potentiometer, as taught by Grome, in the device of Maatta because a potentiometer is well known in the art of sensors to be one of other possible choices of position sensors used to produce a signal indicative of the angular position of the control handle (col. 4, lines 25-28).

Response to Arguments

1. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

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2. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ricardo L. Osorio whose telephone number is 703 305-2248. The examiner can normally be reached on Monday through Thursday from 7:00 A.M. to 5:30 P.M. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala whose telephone number is 703 305-4938.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

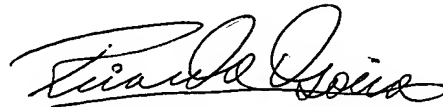
or faxed to:

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703 872-9306 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA, Sixth Floor (Receptionist).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ricardo L. Osorio
Primary Examiner
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RLO
January 3rd, 2006